

REMARKS

1. Introduction

In the Office Action mailed January 30, 2006, the Examiner rejected all pending claims under 35 U.S.C. 103(a). The Examiner rejected claims 1-3, 6, 24, and 27-28 over Steer, U.S. Patent No. 6,845,246 ("Steer") in view of Sunay et al., U.S. Patent No. 5,940,743 ("Sunay").

The Examiner rejected claims 7-8 and 13 over Steer in view of Sunay and in further view of Soliman, U.S. Patent No. 6,490,460 ("Soliman").

The Examiner rejected claims 9-12 over Steer in view of Sunay and in further view of Soliman and in further view of Chen, U.S. Patent No. 6,763,244 ("Chen").

The Examiner rejected claims 14-15 over Chen in view of Steer in view of Sunay and and in further view of Soliman.

The Examiner rejected claims 16-20 over Chen in view of Steer and in further view of Soliman.

The Examiner rejected claims 25 over Steer in view of Sunay and further in view of Amirijoo et al., U.S. Patent No. 6,603,976 ("Amirijoo").

In this Response, Applicant has amended claims 1, 7, 9, and 24 and has canceled claims 14, 15, 27, and 28. Claims 4, 5, 21-23, and 26 were canceled previously. Thus, claims 1-3, 6-13, 16-20, 24, and 25 are currently pending.

For the reasons set forth below, Applicant requests reconsideration and allowance of the claims as amended.

2. Response to Claim Rejections

a. **Claims 1-3 and 6**

Of these claims, claim 1 is independent. The Examiner has rejected claim 1 under § 103(a) as being unpatentable over Steer in of Sunay. In response, Applicant has amended claim 1 to specify that the base station detects a *changed* location of the mobile station. In response to detecting the changed location, the base station interrupts the power control process, selects a new initial power level based on the changed location, and engages in a new power controls process starting at the new initial power level. Applicant submits that this amendment clearly distinguishes claim 1 over the Steer/Sunay combination.

Applicant recognizes that the elements added to claim 1 were recited in claims 27 and 28 (now canceled), which the Examiner also rejected over Steer in Sunay. However, Applicant respectfully submits that the rejections of claims 27 and 28 were not well founded, as set forth below.

With respect to claim 27, the Examiner alleged that Steer teaches “in response to detecting the changed location, the base station interrupting the power control process.” In particular, the Examiner cited to the following sections of Steer: (i) col. 6, lines 22-28; (ii) col. 7, lines 1-19; (iii) col. 7, line 66 – col. 8, line 10; and (iv) col. 8, lines 23-25. However, none of these sections support the Examiner’s position.

Section (i), i.e., col. 6, lines 22-28, refers to a “location process” that serves to determine the location of the mobile station but in no way suggests that the base station will *interrupt* a power control process in response to detecting a changed location.

Section (ii), i.e., col. 7, lines 1-19, refers to a “power control map” that is dynamically updated as connections with mobile stations are made during normal use (e.g., successful calls or

data links). However, section (ii) does not indicate that the power control map is updated in response to changed locations of mobile stations. Moreover, section (ii) in no way suggests that the base station will *interrupt* a power control process when the power control map is updated.

Section (iii), i.e., col. 7, line 66 – col. 8, line 10, states that the mobile station receives map and location information that is used to adjust transmitter power. However, section (iii) in no way suggests that the base station will *interrupt* a power control process in response to detecting a changed location of the mobile station.

Section (iv), i.e., col. 8, lines 23-25, simply states that nominal values of transmitter power stored in the power control map are used as the basis for setting the transmitter power. Once again, nothing in section (iv) suggests that the base station will *interrupt* a power control process in response to detecting a changed location of the mobile station.

Thus, although the Examiner alleged that “the closed loop power control process will be interrupted so that a new initial power level based on the new location can be determined,” the Examiner has not identified any teaching in Steer that suggests interrupting the power control process, as recited in amended claim 1. To the contrary, Steer teaches that the transmission power level is set at *initial call setup*, not in response to detecting a changed location of the mobile station:

This map information is used together with the location of the mobile to help set the radio transmission power level at *initial call setup*, for one way traffic flows or for other conditions in which closed loop power control techniques are not suitable.

(col. 3, lines 27-31)(emphasis added). Thus, Applicant submits that Steer does not teach “in response to detecting the changed location, the base station interrupting the power control process,” as previously recited in claim 27 and now recited in claim 1. Applicant further submits that Sunay does not make up for this deficiency in Steer.

With respect to claim 28, the Examiner has alleged that Steer teaches based on the changed location, the base station selecting a new power level. Although the Examiner has cited to a number of sections of Steer, Applicant submits that nothing in Steer teaches this element. To the contrary, Steer teaches that the transmission power level is set at *initial call setup*, not when the mobile station changes location (col. 3, lines 27-31).

The Examiner also cited to col. 5, lines 20-40 of Sunay. However, this section of Sunay refers to a *second* base station that calculates a transmission power level for a mobile station that is being handed off from a *first* base station. In contrast, “the base station selecting a new initial power level” refers to the *same* base station that selected the initial power level for the mobile station. Thus, Applicant submits that neither Steer nor Sunay teaches “based on the changed location, the base station selecting a new initial power level,” as previously recited in claim 28 and now recited in claim 1.

Accordingly, Applicant submits that claim 1, as amended, is allowable over Steer and Sunay for at least the foregoing reasons. Applicant further submits that claims 2-3 and 6 are allowable for at least the reason that the claims are dependent on an allowable claim.

b. Claims 7-13

Of these claims, claim 7 is independent. The Examiner has rejected claim 7 under § 103(a) as being unpatentable over Steer in view of Sunay and in further view of Soliman. In response, Applicant has amended claim 7 to recite, *inter alia*, “adjusting mobile station transmit power on the primary communication channel so that a mobile station signal-to-noise ratio matches the reverse link setpoint.” Applicant submits that this amendment clearly distinguishes claim 7 over the Steer/Sunay/Soliman combination, as set forth below.

The Examiner has acknowledged that Steer in view of Sunay does not teach a reverse link setpoint based on the location. Instead, the Examiner has cited to Soliman for this element. However, Soliman does not teach a reverse link *setpoint* to which the mobile station's signal-to-noise ratio is to be matched but, rather, upper and lower *limits* of the reverse link signal-to-noise ratio. The Examiner has cited to Table 1 in column 4 of Soliman, but Table 1 lists desired SNR maximum and minimum values, not setpoints. The power control loop maintains the reverse link SNR *between* these minimum and maximum desired levels:

A different power control loop is similarly used to *maintain* the received signal to noise ratio of signals sent on the reverse link (i.e., the SNR measured at the base station of signals sent from the mobile station to the base station) *between a minimum desired level and a maximum desired level*.

(col. 1, lines 28-34)(emphasis added). Thus, the very section cited by the Examiner clearly states that the SNR is maintained between two limits: a minimum desired level and a maximum desired level. In contrast, amended claim 7 recites “adjusting mobile station transmit power on the primary communication channel so that a mobile station signal-to-noise ratio *matches* the reverse link setpoint.” No such matching is taught in Soliman.

Accordingly, Applicant submits that claim 7, as amended, is allowable over Steer, Sunay, and Soliman for at least the foregoing reasons. Applicant further submits that claims 8-13 are allowable for at least the reason that the claims are dependent on an allowable claim.

c. Claims 16-20

Of these claims, claim 16 is independent. The Examiner has rejected claim 16 under § 103(a) as being unpatentable over Chen in view of Steer and in further view of Soliman. In response, Applicant submits that this rejection is improper and should be withdrawn because the Chen/Steer/Soliman combination does not teach each and every element of claim 16, as set forth below.

Step (b) of claim 16 recites “based on the location, the base station selecting a setpoint,” and steps (e) and (f) are directed to adjusting the mobile station transmit power if the energy-to-noise measure does not match the setpoint. The Examiner has acknowledged that Chen in view of Steer does not teach based on location, selection a set point. Instead, the Examiner has cited to Soliman for this element. However, as discussed above for claim 7, Soliman teaches maximum and minimum SNR values, not setpoints. The SNR values in Soliman are not setpoints because the mobile station’s SNR is not *matched* to either the maximum or minimum value but, rather, is kept *between* the maximum and minimum values. In contrast, the method of claim 16 attempts to match the energy-to-noise measure to the setpoint, as indicated by steps (e) and (f).

Accordingly, Applicant submits that claim 16 is allowable over Chen, Steer, and Soliman for at least the foregoing reasons. Applicant further submits that claims 17-20 are allowable for at least the reason that the claims are dependent on an allowable claim.

d. Claims 24 and 25

Of these claims, claim 24 is independent. The Examiner has rejected claim 24 under § 103(a) as being unpatentable over Steer in of Sunay. In response, Applicant has amended claim 24 to recite “the BSC being further configured so that the BSC continually monitors the location of the mobile station and, in response to detecting a new location of the mobile station, the BSC selects from the database a new initial power level based on the new location of the mobile station and instructs the mobile station to transmit at the new initial power level.” Applicant submits that this amendment clearly distinguishes claim 24 over the Steer/Sunay combination. In particular, as discussed above for claim 1, neither Steer nor Sunay teaches “based on the changed location, the base station selecting a new initial power level.”


Accordingly, Applicant submits that claim 24, as amended, is allowable over Steer and Sunay for at least the foregoing reasons. Applicant further submits that claim 25 is allowable for at least the reasons that it is dependent on an allowable claim.

3. **Conclusion**

Applicant submits that the present application is in condition for allowance, and notice to that effect is hereby requested. Should the Examiner feel that further dialog would advance the subject application to issuance, the Examiner is invited to telephone the undersigned at any time at (312) 913-0001.

Respectfully submitted,

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Richard A. Machonkin
Reg. No. 41,962

McDonnell Boehnen Hulbert & Berghoff LLP
300 South Wacker Dr., 31st Floor
Chicago, IL 60606
Tel: 312-913-0001
Fax: 312-913-0002